

# New York State Department Of Transportation Alt Fuels Program

Creating Clean Corridors from the past  
to the future in an environmentally  
sound and cost effective manner.

# BARLOW ROAD, BINGHAMTON CNG SITE, REGION 9 - 3 SEPT 03



# The Past AKA

## In the beginning

- Total Dependence On Foreign Oil, Energy Dependence on Foreign Unstable Governments.
- Passage of Energy Policy Act And Clean Air Act recognize need for future alternatives.
- Lack of planning created ill fated attempts to create sporadic infrastructure with little or no fleet base to support.



# The Dirt Road

- E pact takes effect, fuel providers and government fleets scramble to comply.
- Vehicles are purchased and forced to use insufficient and unreliable infrastructure.
- Dual Fuel vehicles are an attractive crutch for some fleets but quickly dismissed by NYSDOT.

# The First Clean Corridor

- Dedicated CNG Vehicles are recognized as the cleanest, most efficient Alternative Fuel Vehicle.
- 30 low volume, fast fill CNG stations are built in a modular fashion to allow for future expansion.
- The concept of a public/private partnership to establish commercial infrastructure emerges.

# Clean Corridor # 2

- The original 30 stations are upgraded, some increase discharge pressure only, others are expanded with additional FuelMaker compressors, others are replaced with high volume Hurricane Compressors.
- The next phase of 30 additional stations begins to be implemented.
- An RFP for commercial infrastructure is released.

# Clean Corridor # 3

- Recognition of the impact of the heavy duty truck fleet on emissions and looking for an alternative fuel to support this fleet.
- Analyzing the special needs of heavy duty truck fleets to determine an effective strategy.
- Consideration of the impacts of alternate fuels on future heavy truck transportation needs.



# Clean Corridor # 3 continued

- Natural gas engines are the cleanest environmentally and the only engines that meet 2007 EPA emissions standards, but CNG storage is inefficient. LNG is most efficient for trucks.
- Bio diesel is dependent on crude oil and increases NOX emissions but can displace 20% of our diesel fuel consumption.
- ULSD and diesel retro fit technology may meet 2007 standards but don't relieve our dependence on foreign crude oil.



What we face...



# ROADWAY CONGESTION INDEX

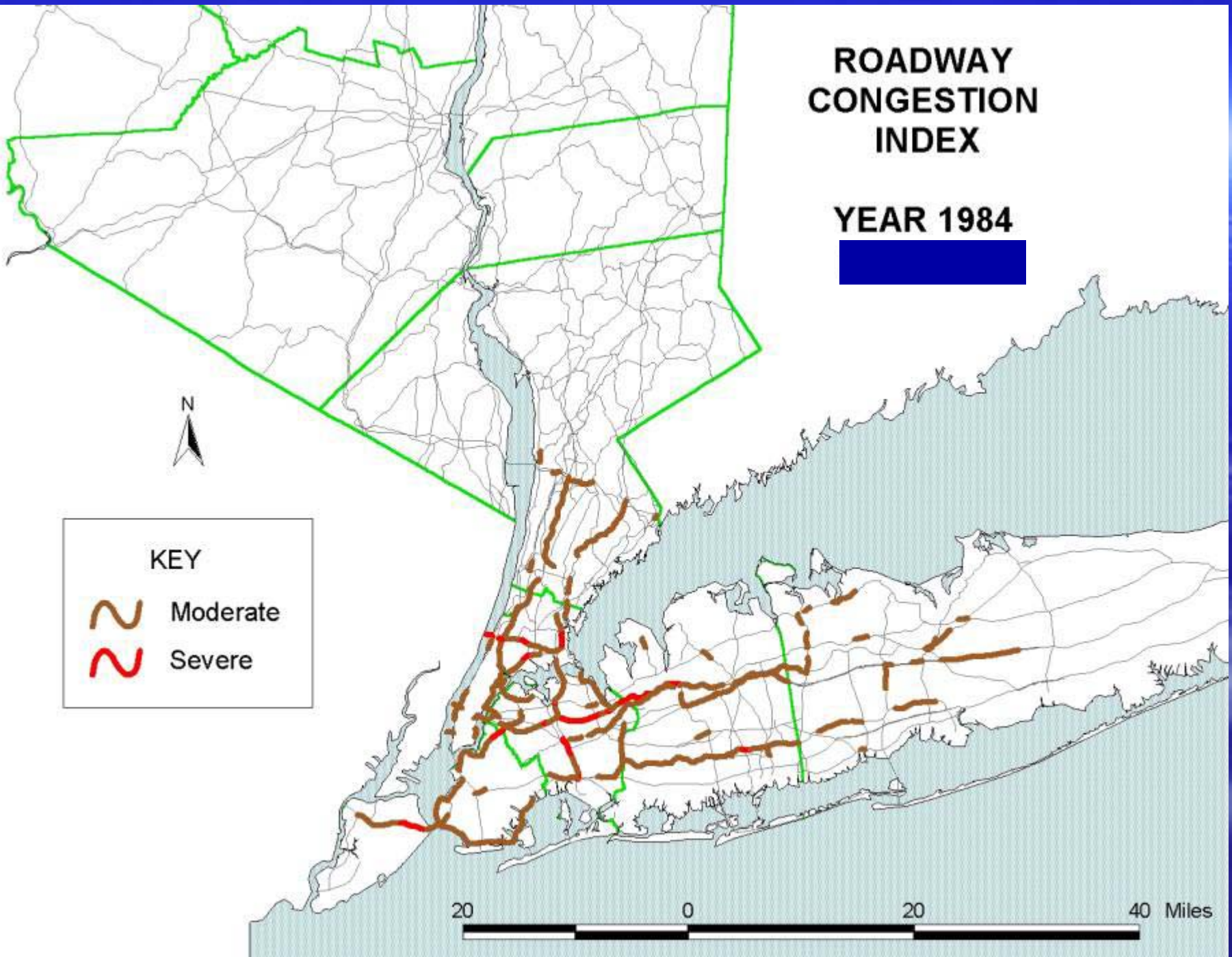
YEAR 1984



## KEY

-  Moderate
-  Severe

20 0 20 40 Miles





# ROADWAY CONGESTION INDEX

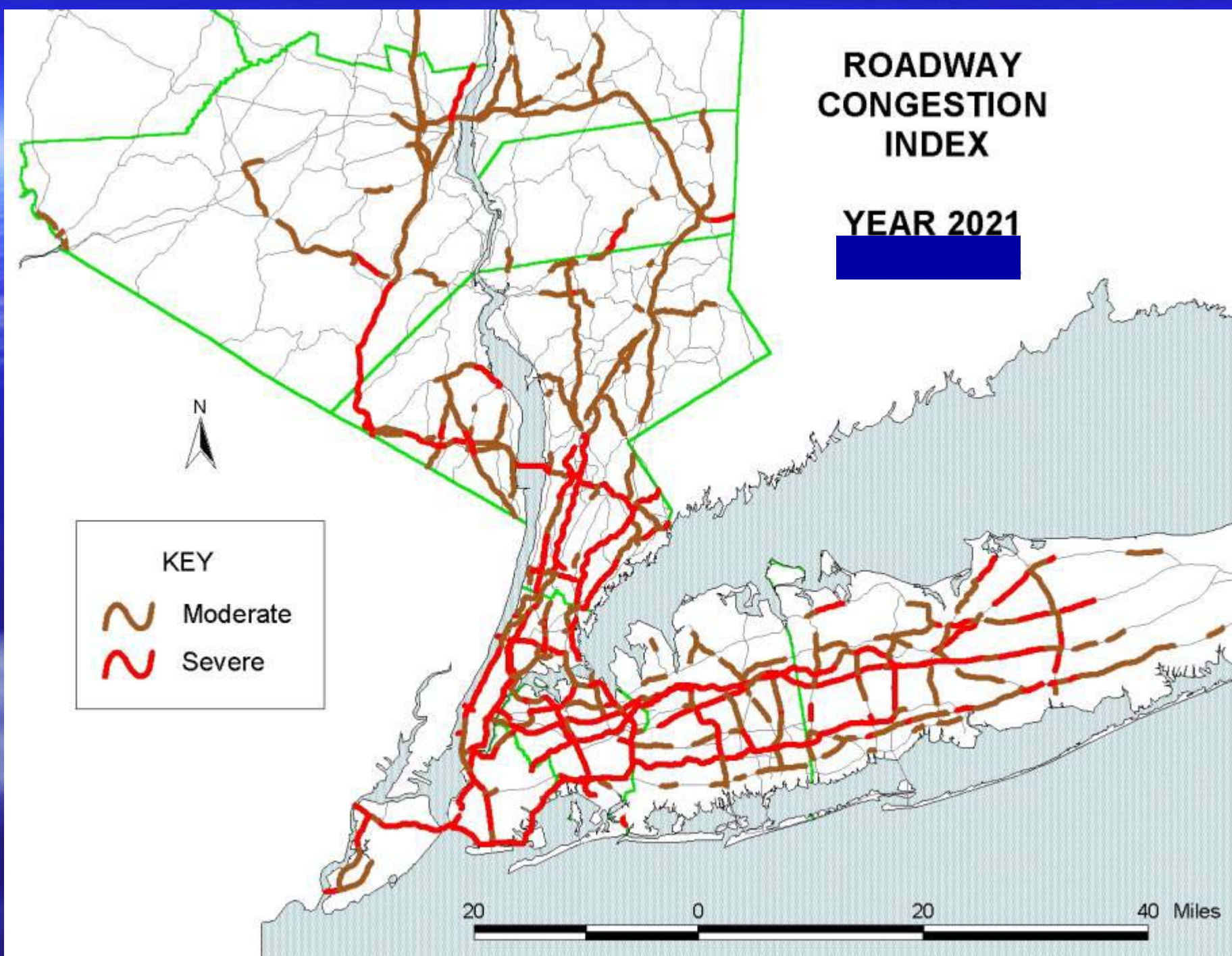
YEAR 2021



## KEY

- Moderate
- Severe

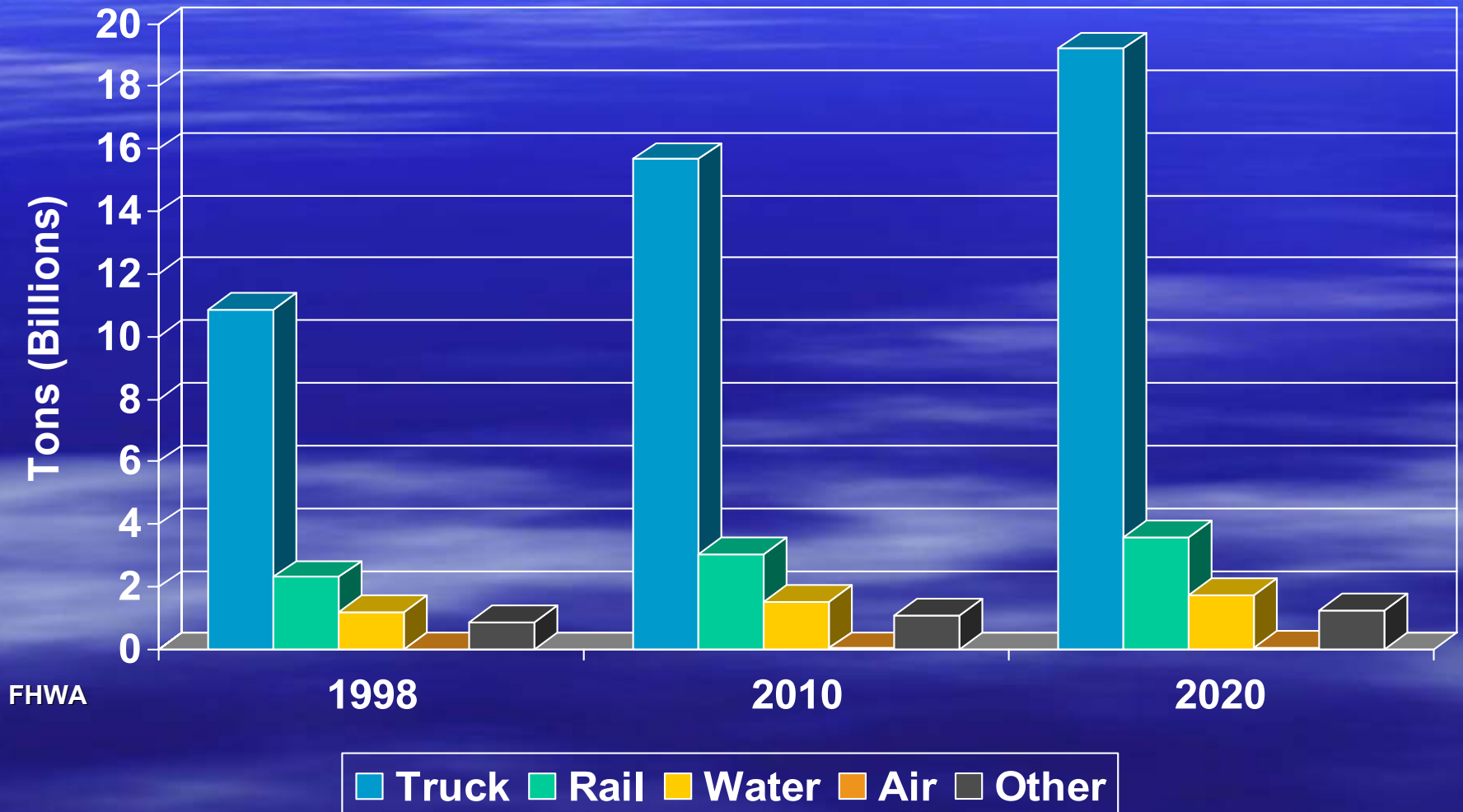
20 0 20 40 Miles





# Total Traffic Forecasts

(domestic and international) by tons



# LNG is the Superhighway to Clean Corridors

- LNG is viable for all fleet vehicles regardless of size.
- LNG does not require pipeline access, it can be liquefied and transported to remote locations.
- LNG is renewable from landfill gas and wastewater gas creating energy independence.

*“The best way to  
predict the future  
is to create it.”*